

## Refine Search

### Search Results -

Terms	Documents
L10 and recycl\$7	30

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L11

Refine Search

Recall Text

Clear

Interrupt

### Search History

DATE: Monday, May 03, 2004    [Printable Copy](#)    [Create Case](#)

**Set Name**   **Query**  
 side by side

**Hit Count**   **Set Name**  
 result set

*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ*

<u>L11</u>	L10 and recycl\$7	30	<u>L11</u>
<u>L10</u>	L9 and ferment\$7	59	<u>L10</u>
<u>L9</u>	L8 and sulfuric acid	311	<u>L9</u>
<u>L8</u>	L7 and evaporat\$6	561	<u>L8</u>
<u>L7</u>	L6 and carbon dioxide	721	<u>L7</u>
<u>L6</u>	L5 and strip\$6	2906	<u>L6</u>
<u>L5</u>	L3 and extract	11353	<u>L5</u>
<u>L4</u>	L3 and exctract	0	<u>L4</u>
<u>L3</u>	L2 or (ratio and carboxylic acid and carboxylate)	38441	<u>L3</u>
<u>L2</u>	ratio and lactic acid and lactate	6845	<u>L2</u>
<u>L1</u>	ratio and lactic acid and lacatate	2	<u>L1</u>

END OF SEARCH HISTORY

## Hit List

Clear

Generate Collection

Print

Fwd Refs

Bkwd Refs

Generate OACS

Search Results - Record(s) 1 through 10 of 30 returned.

☐ 1. Document ID: US 20030004375 A1

Using default format because multiple data bases are involved.

L11: Entry 1 of 30

File: PGPB

Jan 2, 2003

PGPUB-DOCUMENT-NUMBER: 20030004375

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030004375 A1

TITLE: Process for producing a purified lactic acid solution

PUBLICATION-DATE: January 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Mizrahi, Joseph	Haifa	MN	IL	
Eyal, Aharon	Jerusalem		IL	
Riki, Canari	Jerusalem		IL	
Hazan, Betty	Jerusalem		IL	
Starr, John N.	Chaska		US	

US-CL-CURRENT: 562/589

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGS	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	--------

☐ 2. Document ID: US 20020102672 A1

L11: Entry 2 of 30

File: PGPB

Aug 1, 2002

PGPUB-DOCUMENT-NUMBER: 20020102672

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020102672 A1

TITLE: PROCESS FOR PRODUCING A PURIFIED LACTIC ACID SOLUTION

PUBLICATION-DATE: August 1, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
MIZRAHI, JOSEPH	HAIFA	MN	IL	
EYAL, AHARON	JERUSALEM		IL	

RIKI, CANARI	JERUSALEM	IL
HAZAN, BETTY	JERUSALEM	IL
STARR, JOHN	CHASKA	US

US-CL-CURRENT: 435/139

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	--------

☐ 3. Document ID: US 20020038058 A1

L11: Entry 3 of 30

File: PGPB

Mar 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020038058  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020038058 A1

TITLE: Process for recovering low-boiling acids

PUBLICATION-DATE: March 28, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Holtzapple, Mark T.	College Station	TX	US	
Davison, Richard R.	Bryan	TX	US	

US-CL-CURRENT: 568/397

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	--------

☐ 4. Document ID: US 6509179 B1

L11: Entry 4 of 30

File: USPT

Jan 21, 2003

US-PAT-NO: 6509179  
DOCUMENT-IDENTIFIER: US 6509179 B1

TITLE: Continuous process for preparing lactic acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	--------

☐ 5. Document ID: US 6395926 B1

L11: Entry 5 of 30

File: USPT

May 28, 2002

US-PAT-NO: 6395926  
DOCUMENT-IDENTIFIER: US 6395926 B1

TITLE: Process for recovering low-boiling acids

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

☐ 6. Document ID: US 6291708 B1

L11: Entry 6 of 30

File: USPT

Sep 18, 2001

US-PAT-NO: 6291708

DOCUMENT-IDENTIFIER: US 6291708 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Process for production of organic acids and esters thereof

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

☐ 7. Document ID: US 6262313 B1

L11: Entry 7 of 30

File: USPT

Jul 17, 2001

US-PAT-NO: 6262313

DOCUMENT-IDENTIFIER: US 6262313 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Thermal conversion of fatty acid salts to ketones

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

☐ 8. Document ID: US 6043392 A

L11: Entry 8 of 30

File: USPT

Mar 28, 2000

US-PAT-NO: 6043392

DOCUMENT-IDENTIFIER: US 6043392 A

TITLE: Method for conversion of biomass to chemicals and fuels

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

☐ 9. Document ID: US 5959144 A

L11: Entry 9 of 30

File: USPT

Sep 28, 1999

US-PAT-NO: 5959144

DOCUMENT-IDENTIFIER: US 5959144 A

TITLE: Process for the recovery of lactic acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

☐ 10. Document ID: US 5750732 A

L11: Entry 10 of 30

File: USPT

May 12, 1998

US-PAT-NO: 5750732

DOCUMENT-IDENTIFIER: US 5750732 A

TITLE: Method to produce cyclic esters

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachments	Claims	Knowl	Drawings
------	-------	----------	-------	--------	----------------	------	-----------	----------	-------------	--------	-------	----------

[Clear](#)[Generate Collection](#)[Print](#)[Fwd Refs](#)[Bkwd Refs](#)[Generate OACS](#)

Terms

Documents

L10 and recycl\$7

30

Display Format:

[Change Format](#)[Previous Page](#)[Next Page](#)[Go to Doc#](#)

## Hit List

[Clear](#) [Generate Collection](#) [Print](#) [Fwd Refs](#) [Bkwd Refs](#)  
[Generate OACS](#)

**Search Results** - Record(s) 11 through 20 of 30 returned.

☐ 11. Document ID: US 5563069 A

**Using default format because multiple data bases are involved.**

L11: Entry 11 of 30

File: USPT

Oct 8, 1996

US-PAT-NO: 5563069

DOCUMENT-IDENTIFIER: US 5563069 A

TITLE: Extractive fermentation using convoluted fibrous bed bioreactor

DATE-ISSUED: October 8, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yang; Shang-Tian	Dublin	OH		

US-CL-CURRENT: 435/295.3; 435/297.1, 435/299.1

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequence</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">K00C</a>	<a href="#">Draw Data</a>
----------------------	-----------------------	--------------------------	-----------------------	------------------------	--------------------------------	----------------------	---------------------------	--------------------------	-----------------------------	------------------------	----------------------	---------------------------

☐ 12. Document ID: US 5420304 A

L11: Entry 12 of 30

File: USPT

May 30, 1995

US-PAT-NO: 5420304

DOCUMENT-IDENTIFIER: US 5420304 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Method to produce cyclic esters

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequence</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">K00C</a>	<a href="#">Draw Data</a>
----------------------	-----------------------	--------------------------	-----------------------	------------------------	--------------------------------	----------------------	---------------------------	--------------------------	-----------------------------	------------------------	----------------------	---------------------------

☐ 13. Document ID: US 5319107 A

L11: Entry 13 of 30

File: USPT

Jun 7, 1994

US-PAT-NO: 5319107

DOCUMENT-IDENTIFIER: US 5319107 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Method to produce cyclic esters

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

☐ 14. Document ID: US 5188858 A

L11: Entry 14 of 30

File: USPT

Feb 23, 1993

US-PAT-NO: 5188858

DOCUMENT-IDENTIFIER: US 5188858 A

TITLE: Propylene glycol diesters of medium chain and long chain saturated fatty acids useful as reduced calorie cocoa butter substitutes and hard butters

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

☐ 15. Document ID: US 4379862 A

L11: Entry 15 of 30

File: USPT

Apr 12, 1983

US-PAT-NO: 4379862

DOCUMENT-IDENTIFIER: US 4379862 A

TITLE: Process for the preparation of polyurethane resins using low molecular weight polyhydroxyl compounds prepared by the condensation of formaldehyde

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

☐ 16. Document ID: US 4343937 A

L11: Entry 16 of 30

File: USPT

Aug 10, 1982

US-PAT-NO: 4343937

DOCUMENT-IDENTIFIER: US 4343937 A

TITLE: 3-Substituted-7-methoxy-7-amino-3-cephem-4-carboxylic acids

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

☐ 17. Document ID: US 4342869 A

L11: Entry 17 of 30

File: USPT

Aug 3, 1982

US-PAT-NO: 4342869

DOCUMENT-IDENTIFIER: US 4342869 A

TITLE: Cephalosporin antibiotics

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

☐ 18. Document ID: US 4342757 A

L11: Entry 18 of 30

File: USPT

Aug 3, 1982

US-PAT-NO: 4342757

DOCUMENT-IDENTIFIER: US 4342757 A

TITLE: Cephalosporin antibiotic compositions

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGURE	Drawings
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	--------	----------

☐ 19. Document ID: US 4338438 A

L11: Entry 19 of 30

File: USPT

Jul 6, 1982

US-PAT-NO: 4338438

DOCUMENT-IDENTIFIER: US 4338438 A

TITLE: Cephalosporin antibiotics

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGURE	Drawings
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	--------	----------

☐ 20. Document ID: US 4338437 A

L11: Entry 20 of 30

File: USPT

Jul 6, 1982

US-PAT-NO: 4338437

DOCUMENT-IDENTIFIER: US 4338437 A

TITLE: Cephalosporin antibiotics

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGURE	Drawings
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	--------	----------

[Clear](#)[Generate Collection](#)[Print](#)[Fwd Refs](#)[Bkwd Refs](#)[Generate OACS](#)

Terms

Documents

L10 and recyl\$7

30

Display Format: [Change Format](#)[Previous Page](#)[Next Page](#)[Go to Doc#](#)



## Hit List

Clear

Generate Collection

Print

Fwd Refs

Bkwd Refs

Generate OACS

**Search Results** - Record(s) 21 through 30 of 30 returned.☐ 21. Document ID: US 4324890 A**Using default format because multiple data bases are involved.**

L11: Entry 21 of 30

File: USPT

Apr 13, 1982

US-PAT-NO: 4324890

DOCUMENT-IDENTIFIER: US 4324890 A

TITLE: Cephalosporin intermediates

DATE-ISSUED: April 13, 1982

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Christensen; Burton G.	Scotch Plains	NJ		
Karady; Sandor	Elizabeth	NJ		
Cama; Lovji D.	Edison	NJ		
Sletzinger; Meyer	North Plainfield	NJ		

US-CL-CURRENT: 540/221; 540/226, 540/227

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	EMOC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	--------

☐ 22. Document ID: US 4301310 A

L11: Entry 22 of 30

File: USPT

Nov 17, 1981

US-PAT-NO: 4301310

DOCUMENT-IDENTIFIER: US 4301310 A

TITLE: Process for the preparation of low molecular weight polyhydroxyl compounds

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	EMOC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	--------

☐ 23. Document ID: US 4297488 A

L11: Entry 23 of 30

File: USPT

Oct 27, 1981

US-PAT-NO: 4297488

DOCUMENT-IDENTIFIER: US 4297488 A

**\*\* See image for Certificate of Correction \*\***

TITLE: 7-.alpha.-Methoxy cephalosporins

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGURE	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	--------	---------

☐ 24. Document ID: US 4219508 A

L11: Entry 24 of 30

File: USPT

Aug 26, 1980

US-PAT-NO: 4219508

DOCUMENT-IDENTIFIER: US 4219508 A

TITLE: Process for the preparation of low molecular weight polyhydroxyl compounds

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGURE	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	--------	---------

☐ 25. Document ID: US 3965168 A

L11: Entry 25 of 30

File: USPT

Jun 22, 1976

US-PAT-NO: 3965168

DOCUMENT-IDENTIFIER: US 3965168 A

**\*\* See image for Certificate of Correction \*\***

TITLE: 3-Carbamoyl-3-hydroxyglutaric acid and salts

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGURE	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	--------	---------

☐ 26. Document ID: US 3960941 A

L11: Entry 26 of 30

File: USPT

Jun 1, 1976

US-PAT-NO: 3960941

DOCUMENT-IDENTIFIER: US 3960941 A

**\*\* See image for Certificate of Correction \*\***

TITLE: 3-Hydroxy-3,4-dicarbamoylbutyric acid and salts

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	FIGURE	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	--------	---------

☐ 27. Document ID: US 3911002 A

L11: Entry 27 of 30

File: USPT

Oct 7, 1975

US-PAT-NO: 3911002

DOCUMENT-IDENTIFIER: US 3911002 A

**\*\* See image for Certificate of Correction \*\***

TITLE: 3-Carbamoyl-3-hydroxy-4-halobutyric acid and salts thereof

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	PMOC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	--------

☐ 28. Document ID: US 3843711 A

L11: Entry 28 of 30

File: USPT

Oct 22, 1974

US-PAT-NO: 3843711

DOCUMENT-IDENTIFIER: US 3843711 A

TITLE: CHEMICAL PROCESS AND COMPOSITIONS

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	PMOC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	--------

☐ 29. Document ID: US 3843692 A

L11: Entry 29 of 30

File: USPT

Oct 22, 1974

US-PAT-NO: 3843692

DOCUMENT-IDENTIFIER: US 3843692 A

**\*\* See image for Certificate of Correction \*\***

TITLE: 3-CARBAMOYL-3,4-EPOXYBUTYRIC ACID AND THE ALKALI METAL, ALKALINE EARTH METAL AND AMMONIUM SALTS

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	PMOC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	--------

☐ 30. Document ID: US 3769337 A

L11: Entry 30 of 30

File: USOC

Oct 30, 1973

US-PAT-NO: 3769337

DOCUMENT-IDENTIFIER: US 3769337 A

TITLE: PROCESS FOR THE PREPARATION OF CITRIC ACID

DATE-ISSUED: October 30, 1973

INVENTOR-NAME: WIEGAND K

US-CL-CURRENT: 562/584; 548/544, 549/548, 558/441, 558/442, 560/170, 560/174, 562/564, 562/567, 562/571, 562/577, 562/858

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	PMOC	Draw D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	--------

Clear

Generate Collection

Print

Fwd Refs

Bkwd Refs

Generate OACS

Terms

Documents